

## Individual Review Form

**Proposal number: 2001-I204-2**

**Short Proposal Title: Watershed Education Project**

**1a) Are the objectives and hypotheses clearly stated?**

Objectives are stated as: continue the efforts of the education coordinator; establish positions in other districts; provide a set of Adopt-A-Watershed classroom kits; provide additional Project WET training; maintain and expand restoration areas and field study opportunities for students; enhance links to other educational programs; support an Americorp team to work in classrooms and field; project management.

Education objective: develop a sustainable program that is integrated throughout the k-12 curricula, that meets state standards, and will empower students and parents to take actions to protect, restore and enhance critical ecosystems.

Hypotheses: Students who visit a site on a daily or weekly basis over a period of years will have an understanding of long term trends if given a basic foundation in science concepts. Once awareness is achieved, the next level is action.

**1b1) Does the conceptual model clearly explain the underlying basis for the proposed work?**

Yes. Changing public attitudes is critical to the long term success of CALFED. This comprehensive k-12 public education program will increase public understanding and awareness of resource issues, change perceptions and fuel enthusiasm to restore and enhance natural resources. It will foster active participation in conservation programs, or encourage individuals to wisely use natural resources.

**1b2) Is the approach well designed and appropriate for meeting the objectives of the project?**

Structured program includes: the introduction of grade-level appropriate, standards based science concepts; long term field study; restoration activities; and community service action.

**1c1) Has the applicant justified the selection of research, pilot or demonstration project, or a full scale implementation project?**

Butte Creek had one of California's largest spring runs of Chinook salmon. Urbanization, hydro modification, agricultural runoff, etc have severely impacted this and other species of concern. Schools in the region are within walking distance of streams which facilitates field study and restoration work.

**1c2) Is the project likely to generate information that can be used to inform future decision making?**

Students and parents will have a better understanding of "the little things we can all do to protect, restore, and enhance ecosystems." Students who participate in this project from kindergarten to grade 12 will have a greater understanding of how watersheds and stream ecosystems function. As adults this is sure to influence decisions they make.

**2a) Are the monitoring and information assessment plans adequate to assess the outcome of the project?**

Project will be assessed using the following: Education coordinator's annual report; Adopt-A-Watershed classroom kits checkout records; training summaries and certificates; photo monitoring of restoration and

field study activities; Regional Watershed Workshop and Watershed Education Committee reports; Americorp annual reports; and quarterly and final reports.

Project needs long term study of impact on participants. Students and parents may have a better understanding of “the little things we can all do to protect, restore, and enhance ecosystems,” but will they take action on this understanding. Will there be a permanent change in behavior - participants make lifestyle choices that have at least a neutral effect on watersheds?

**2b) Are data collection, data management, data analysis, and reporting plans well-described, scientifically sound and adequate to meet the proposed objectives?**

Collection of biological/ecological data is well documented, and reports to be completed are outlined. These reports should be adequate.

**3) Is the proposed work likely to be technically feasible?**

This project has been in operation for two years. The proposal to increase the scope of the project is feasible based on the information provided.

**4) Is the proposed project team qualified to efficiently and effectively implement the proposed project?**

Yes. The Director has a good background in education and natural resources. The Education Coordinator (EC) has an excellent background in education with experience in both formal and informal education. The EC also has a good background in botany and is a trained Adopt-A-Watershed facilitator.

**Miscellaneous comments:** Grade-level appropriate science concepts, long-term (multi-year) field study for students, and community service/restoration activities where students use the knowledge they have gained, all make this a great project. Proposal is for a three year grant.

**Overall Evaluation Summary Rating**

Excellent  
**X Very Good**  
**Good**  
☐ **Fair**  
☐ **Poor**  
☐  
☐

**Provide a brief explanation of your summary rating:**

- A comprehensive k-12 program has potential to significantly impact attitudes and behaviors of participants. However study is needed to confirm this.  
- Innovative staffing thru use of Americorp, student interns from CSU Chico, and volunteers including parents.  
- Diversity of multiple partners.  
- Enhancing linkages to other watershed educational programs.